

A CONTRIBUTION TO THE FLORA OF THE PUNJAB
AND THE ASSOCIATED HILL REGIONS

BY

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PART II.

(Continued from Vol. xlii, No. 1, 149).

XL. ANACARDIACEAE.

106. RHUS L.

190. *Rhus semialata* Murray.

Locality.—Rawalpindi (Jerram 8090! alt. 4,500 ft.).

Distribution.—Temperate Himalaya; from Bahahal to Sikkim, alt. 3-6,000 ft.; Khasia Hills, alt. 3-5,000 ft.

191. *Rhus rhodanthema* Engl.

Locality.—Lahore (Mustoe 11706!).

Flowers.—March; Bright crimson.

192. *Rhus copallina* L. Sp. Pl. 266.

Locality.—Lahore—Ag. Hort. Gdns. (*Parker 6771!).

Flowers.—December.

* Introduced from Cuba.

Distribution.—N. America.

193. *Rhus laevigata* L. Sp. Pl. ed. II, 1672.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38633!).

Flowers.—April.

Distribution.—S. Africa.

107. PISTACIA L.

194. *Pistacia integerrima* Stewart in Brandis For. Flor. 122, t. XXII.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 31045!).

Flowers.—March.

Distribution.—Cultivated. North-Western Frontier; Peshawar valley and Salt Range; Western Himalaya; alt. 1,200-8,000 ft., from the Indus to Kumaon, usually on hot slopes.

108. SCHINUS L.

195. *Schinus terebinthifolius* Raddi, in Mem. Mod. XVIII. Fis. (1820) 399.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14364!).

Flowers.—October.

Distribution.—Brazil.

196. **Schinus molle** L. Sp. Pl. 388.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38638 !, 11458).

Flowers.—February–May.

Distribution.—Tropical America.

197. **Schinus dependens** Orteg. Hort. Matr. Dec. 102.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14875 !).

Flowers.—April.

Distribution.—Brazil.

109. ODINA ROXB.

198. **Odina Woodier** Roxb. Fl. Ind. II, 293.

Locality.—Gurdaspur (Panc 4859 !); Hoshiarpur (Ait. 514 !).

Flowers.—June.

Distribution.—India; Ceylon.

XLI. LEGUMINOSAE.

I. PAPILIONACEAE.

110. ARGYROLOBIUM ECKL. & ZEYL.

199. **Argyrobium flaccidum** Jaub. & Späcl.

Locality.—Dalhousie (49 !).

Distribution.—India.

III. CROTALARIA L.

200. **Crotalaria Burhia** Hamilt. in Wall. Cat. 5386.

Locality.—Lahore—Kot Lakhpat (Parker 14348 !); Rawalpindi (Ait. 691 !).

Flowers.—October.

Distribution.—Afghanistan, Baluchistan, N.-W. India, Gujarat, Rajputana, Sind.

201. **Crotalaria prostrata** Roxb. Hort. Beng. 54.

Locality.—Hoshiarpur (Ait. 567 !).

Distribution.—India. Ceylon, Java.

202. **Crotalaria alata** Hamilt. ex. Roxb. in Don. Prodr. 241.

Locality. Kangra (Jameson 33667 !, 33668 !); Hoshiarpur (Ait. 532 !).

Distribution.—Java; N.-W. India.

203. **Crotalaria sericea** Retz.

Locality.—Gurdaspur (Drum. 2 !); Rawalpindi (Ait. 576 !).

Flowers.—October–November.

Distribution.—N.-W. India.

204. **Crotalaria medicaginea** Lamk. Dict. II, 201.

Variety.—*neglecta*.

Locality.—Hoshiarpur (Ait. 279 !).

Flowers.—August.

Distribution.—Malay isles; Afghanistan; China; Australia. India—Rajputana, Sind, N.-W. India to Ceylon and Burma.

112. TRIGONELLA L.

205. **Trigonella Foenum-graecum** L.

Locality.—Lahore (Stewart 2550 !; 2902 !); Rawalpindi (363 !).

Flowers.—April.

Distribution.—S. Europe and Orient, widely cultivated. N.-W. India.

113. MELILOTUS JUSS.

206. *Melilotus parviflora* Desf.

Locality.—Rawalpindi—Hussand (Ait. 370!, 369!, 368!); Lahore (2933!; Stewart 2557!, 2602!).

Flowers.—March-May.

Distribution.—Orient, Europe and introduced in many other regions. India.

207. *Melilotus alba* Lamk. Diet. IV, 63.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 21718!).

Flowers.—March; White.

* Grown for fodder.

Distribution.—Europe; Orient; Siberia. India.

208. *Melilotus indica* All. Fl. Pedem I (1785) 308.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 21716!).

Flowers.—March; Yellow.

* Grown for fodder.

Distribution.—Europe; S. Persia; Afghanistan; Baluchistan and introduced in many other localities.

209. *Melilotus corylifolia* Linn.

Locality.—Rawalpindi (Ait. 371!).

Flowers.—April; Weed.

114. MEDICAGO L.

210. *Medicago falcata* L.

Locality.—Rawalpindi (*Ait. 364!).

Flowers.—April.

* Cultivated for fodder (lucern).

Distribution.—Afghanistan; Orient; and all through Europe. N.-W. India.

211. *Medicago laciniata* All.

Locality.—Rawalpindi (Ait. 367!, 1037!).

Flowers.—March-April.

Distribution.—Abyssinia; Egypt; Baluchistan. India.

212. *Medicago denticulata* Willd.

Locality.—Lahore (* Parker 21715!, Stewart 2552!), Rawalpindi (Ait. 366!).

Flowers.—March.

* Cold weather weed in grassy places.

Distribution.—Europe; Abyssinia; Baluchistan; Orient; China; Japan; Siberia. India.

213. *Medicago Minima* Lamk.

Locality.—Rawalpindi—Barrakow (Ait. 365!).

Flowers.—April.

Distribution.—Afghanistan; Orient; Mediterranean region; Abyssinia; Europe. India.

115. CYAMOPSIS DC.

214. *Cyamopsis psoralioides* DC.

Locality.—Rawalpindi—Futtehgunj (Ait. 372!).

Flowers.—August.

Distribution.—Afghanistan. India—Rajputana, Sind.

Quite wild and not cultivated N.-W. of the Jhelum river.

116. INDIGOFEA L.

215. *Indigofera echinata* Willd.

Locality.—Rawalpindi—Googerkhaw (Ait. 374!).

Flowers.—June.

Distribution.—Guinea. India—Western Peninsula. Ceylon.

216. *Indigofera cordifolia* Heyne.

Locality.—Rawalpindi (Ait. 140!).

Flowers.—August.

Distribution.—Afghanistan; Baluchistan; Nubia; Malay Isles; N. Australia. India.

217. *Indigofera hirsuta* L.

Locality.—Hoshiarpur (Ait. 533!).

Distribution.—Tropical America; Java; Philippines; N. Australia. India.

218. *Indigofera tinctoria* L.

Locality.—Hoshiarpur (Ait. 295!).

Distribution.—Tropical regions, cultivated for local use.

219. *Indigofera hebeptala* Benth. Mss.

Locality.—Rawalpindi (Jerram 8274!).

Flowers.—July.

Distribution.—India—Himalayas, from Kashmir to Sikkim, alt. 6-15,000 ft.

220. *Indigofera pulchella* Roxb. Hort. Beng. 57.

Locality.—Hoshiarpur (Ait. 530!).

Distribution.—Throughout the Himalayas and hills of India proper, ascending to 5,000 ft., in Kumaon.

117. PSORALEA L.

221. *Psoralea plicata* Delile.

Locality.—Lahore—Chang (* Parker 13790!); Lahore 2903!; Hissar (Duthie 5234!).

Flowers.—August-September. Petals pale yellow, tipped with purple.

Distribution.—Arabia; Egypt; Tropical Africa. India—Plains of the Punjab.

118. EYSENHARDTIA H. B. & K.

222. *Eysenhardtia amorphoides* H. B. & K. Nov. Gen. et. Sp. VI, 489.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 38771!, 21023!).

Flowers.—March-August.

* Seed from Mexico. Petals all free. St. 9, 1, Anthers uniform. Ovary 2-ovulate. A shrub 6 ft. high. Leaves absolutely gland-dotted.

Distribution.—Mexico.

119. AMORPHA L.

223. *Amorpha fruticosa* L. Sp. Pl. 713.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38840!, 13639!, 13638!, 13637!, 12946!).

Flowers.—June-August.

Distribution.—N. America.

120. MILLETTIA WT. & ARN.

224. *Millettia ovalifolia* Kurz in Journ. Asiat. Soc. Beng. XLII, 2, 68, excl. Syn. W. & A.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 11460 !, 14372 !, 12969 !, 38862 !); Ravi Park (Parker 38640 !).

Flowers.—April-August.

Distribution.—Burma.

121. TEPHROSIA PERS.

225. *Tephrosia tenuis* Wall. Cat. 5970.

Locality.—Rawalpindi (Ait. 145 !); Barrokow (Ait. 375 !).

Flowers.—August-September.

Distribution.—Laccadives. India—plains of Sind, Rajputana, the Punjab, Konkan.

226. *Tephrosia purpurea* Pers. Syn. Pl. II (1807) 329.

Locality.—Rawalpindi (Ait. 579 !).

Flowers.—October.

Distribution.—India—Rajputana. Ceylon. Everywhere in the tropics.

227. *Tephrosia Hamiltonii* J. R. Drum. in Gamble. Fl. Madras (1918) 320.

Locality.—Pabbi Hills (Parker 24514 !, 24516 !).

Flowers.—December.

Distribution.—India.

122. SESBANIA PERS.

228. *Sesbania aegyptiaca* Pers.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 6776 !, 6775 !).

Flowers.—December.

A small tree—20 ft. high.

Distribution.—Cosmopolitan in tropics of Old World.

229. *Sesbania aculeata* Pers.

Locality.—Multan (Holland 26316 !; 36130); Lahore—Kot Lakhpat (Parker 14327 !, 14328., 14329 !); Rawalpindi (Ait. 186 !, 575 !).

Flowers.—July-October.

Grows up to 8.9 ft. high.

Distribution.—Tropics of the Old World. India—Rajputana, Sind.

123. ASTRAGALUS L.

230. *Astragalus prolixus* Sieber Pl. Aegypt. Exsic.

Locality.—Lahore 2910 !; (Stewart 2528 !).

Flowers.—March.

Distribution.—Cape Verde Islands; Egypt; Arabia. India—Plains of Sind and Punjab.

231. *Astragalus Aitchisoni* Baker.

Locality.—Rawalpindi (Ait. 1040 !).

Flowers.—February.

Distribution.—India—Punjab.

232. *Astragalus tribuloides* Delile.

Locality.—Lahore (Stewart 2527 !); Rawalpindi (Ait. 379 !); Lyallpur (Inayat).

Flowers.—March-May.

Distribution.—Canaries through Egypt to Afghanistan. India—Plains of the Punjab.

233. *Astragalus pyrrhotrichus* Boiss. Diag. IX, 73.

Locality.—Near Peshawar (Collett 57 !); Rawalpindi—between Huzroo and Attel on plains (* Ait. 1043 !).

* Not common.

Distribution.—Afghanistan. India—the Punjab.

234. *Astragalus Psilocentros* Fisch. in Bull. Soc. Nat. Mosc. (1853) II, 405 = *polyacanthus*.

Locality.—Pabbi, west of Jhelum (Lambert 39880, alt. 1,100 ft.); Rawalpindi (Ait. 378 !).

Flowers.—March.

Distribution.—India—Himalayan region.

235. *Astragalus compositum* Bth. ex Bunge, Astrag. II, 3.

Locality.—Rawalpindi (Ait. 376 !); Near Peshawar (Collett 57 !).

Flowers.—April.

Distribution.—Afghanistan.

124. TAVERNIERA DC.

236. *Taverniera nummularia* DC. Prodr. II, 339.

Locality.—Rawalpindi (23990 !, 6153 !); (Ait. 146 !, 380 !).

Flowers.—April-August-December.

Distribution.—Orient; Afghanistan; Baluchistan. India—Plains of Sind and the Punjab.

125. ONOBRYCHIS GAERTN.

237. *Onobrychis Stewartii* Baker.

Locality.—Rawalpindi (Ait. 377 !).

Flowers.—April.

Distribution.—India—the Punjab.

126. LESPEDEZA MICH.

238. *Lespedeza sericea* Miq. Ann. Mus. Lug. Bat. III, 49.

Locality.—Dalhousie (244 !, 245 !, 246 !, 247 !; Drum's collection); Rawalpindi—Barrakow and Triete (Ait. 383 !).

Flowers.—September.

Distribution.—China; Japan; N. Australia. India—the Punjab.

239. *Lespedeza eriocarpa* DC.

Locality.—Dalhousie (34 !; Drum's Herb.); Rawalpindi—Murree (Ait. 1048 ! alt. 7,000 ft.).

Flowers.—July.

Distribution.—India—the Punjab.

127. ALHAGI DESV.

240. *Alhagi camelorum* Fisch. Ind. Hort. Gorenk. ed. 2 (1812) 72.

Locality.—Lahore—Ag. Hort. Gdns. (Parker * 13640 !, 13135 !, 13809 !, 13808 !); Chang (Parker 13783 !).

Flowers.—April-September.

* Wild.

Distribution.—Egypt; Arabia. India—Sind, Rajputana, N. and N.-W. Provinces. Baluchistan.

128. ZORNIA GMEL.

241. *Zornia diphylla* Pers.

Locality.—Dalhousie (Drum. 33!).

Flowers.—August.

Distribution.—Everywhere in the Tropics. India—Plains from the Himalayas to Ceylon and Burma.

129. URARIA DESV.

242. *Urania neglecta* Prain in Journ. As. Soc. Beng. LXVI, 382, 1897.

Locality.—Hoshiarpur (Ait. 463!).

Distribution.—India.

130. ALYSICARPUS NECK.

243. *Alysicarpus longifolius* W. & A. Prodr. 233.

Locality.—Lahore (2950).

Distribution.—Plains, scattered throughout India proper.

131. OUGEINIA BENTH.

244. *Ougeinia dalbergioides* Benth. Pl. Jungh. 216.

Locality.—Hoshiarpur (Holland 45329!); (Mardainali 337!).

Flowers.—March.

Distribution.—Hilly tracts of Northern India and Konkan, ascending to 4,000 ft. in Kumaon.

132. DESMODIUM DESV.

245. *Desmodium laxiflorum* DC. Prodr. II, 335.

Locality.—Dalhousie (Drum. 4616!).

Distribution.—Java; Borneo; Philippines. India.

246. *Desmodium podocarpum* DC. Prodr. II, 336.

Locality.—Dalhousie (Drum. 59!).

Flowers.—September.

Distribution.—China; Japan. India—temperate and tropical Himalayas, alt. 2,000-7,000 ft., from Simla and Gharwal to Khasia and Sikkim.

247. *Desmodium tiliaefolium* G. Don Gen. Syst. II, 297.

Locality.—Rawalpindi—Triete (Ait. 382!).

Flowers.—September.

Distribution.—All along the Himalayas from the upper Punjab to Tavoy. Temperate and tropical zones, ascending to 9,000 ft.

248. *Desmodium gangeticum* DC. Prodr. II, 327.

Locality.—Hoshiarpur (Ait. 471!).

Distribution.—Tropical Africa; Malay Isles; Philippines; China, introduced in West Indies. India.

133. ABRUS L.

249. *Abrus precatorius* L.

Locality.—Hoshiarpur (Ait. 519!).

Distribution.—India—Himalayas to Ceylon and Siam. Cosmopolitan in the Tropics, often planted.

134. CICER L.

250. *Cicer arietinum* L.

Locality.—Lahore (Stewart 2554 !).

Flowers.—March.

Distribution.—India—Commonly cultivated in northern provinces and Nilgiris. Cultivated in various temperate and tropical countries.

135. VICIA L.

251. *Vicia hirsuta* Koch. Synops. 191.

Locality.—Peshawar College (Quizilbash 23 !); Hoshiarpur (Ait. 575 !).

Distribution.—Europe; Orient. India—N.-W. Provinces.

252. *Vicia pallida* Turcz.

Locality.—Rawalpindi—Hussanal (Ait. 389 !).

Flowers.—March.

Distribution.—Siberia. India.

253. *Vicia Griffithii* Baker.

Locality.—Rawalpindi—Futtehgunj (Ait. 10461 !); Hussanal (Ait. 389 !, 1045 !).

Flowers.—March.

Distribution.—Afghanistan. India.

254. *Vicia sativa* L.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 21705 !, 21706 !); near Peshawar (Collett); Lahore (Stewart 2529 !); Rawalpindi (Ait. 385 !, 387 !, 386 !).

Flowers.—March-April.

* Weed in wheat crop.

Distribution.—India—N.-W. Provinces, probably cultivated.

255. *Vicia bithynica* L. Syst. ed. x, 1166.

Locality.—Gurdaspur (Drum. 11 !).

Flowers.—February.

Distribution.—Mediterranean region.

136. LATHYRUS L.

256. *Lathyrus Aphaca* L.; DC. Prodr. II, 372.

Locality.—Rawalpindi (Ait. 391 !); Lahore (Stewart 2915 !).

Flowers.—March-April.

Distribution.—Europe; Orient; Abyssinia. India—spread through the N. Provinces, ascending from the plains of Bengal to the temperate zone in Hazara, Kashmir and Kumaon.

257. *Lathyrus sativus* L.; DC. Prodr. II, 373.

Locality.—Rawalpindi—Hoshiarpur (Ait. 91 !); Barrakow (Ait. 393 !).

Flowers.—April.

Distribution.—Europe; Orient; Tropical Africa. India—spread through the N. Provinces, ascending from the plains of Bengal to Kumaon.

258. *Lathyrus sphaericus* Retz.; D.C. Prodr. II, 372.

Locality.—Gurdaspur (Drum. 9 !); Hoshiarpur (Ait. 1047 !).

Flowers.—February; Colour—vermilion.

Distribution.—Europe; Orient; Abyssinia. India—N.-W. Provinces, ascending from Bundelkhand and the Punjab to 5,500 ft. in Kumaon.

259. *Lathyrus inconspicuus* L.; DC. Prodr. II, 372.

Locality.—Rawalpindi (Ait. 394 !).

Flowers.—April.

Distribution.—Mesopotamia; Syria; Afghanistan; Baluchistan. India—Sind, the Punjab.

137. *MUCUNA ADANS.*

260. *Mucuna pruriens* DC. Prodr. II, 405.

Locality.—Hoshiarpur (Ait. 470!).

Distribution.—Cosmopolitan in the Tropics. India—from the Himalayas, in the plains to Ceylon and Burma.

138. *ERYTHRINA L.*

261. *Erythrina Crista-galli* L. Mant 1, 99.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 13735!, 13131!).

Flowers.—May. Bright pink.

* Almost spine-less form. A small tree 20 ft. high. Bark rough corky. In winter shoots die back for 18 in. apparently naturally and not owing to frost.

Distribution.—Brazil.

262. *Erythrina Blakei* Hort.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 13666!).

Flowers.—May.

* Grown in N. Indian gardens as *E. Blakei*. Seems to be a hybrid or form of *E. herbacea* L.

139. *BUTEA ROXB.*

263. *Butea frondosa* Roxb. Cor. Pl. 21, t. 21.

Locality.—Hoshiarpur (Ait. 124!).

Distribution.—Plains from the Himalayas to Ceylon and Burma, ascending to 4,000 ft. in the North-west, Rajputana, Sind.

140. *PHASEOLUS L.*

264. *Phaseolus aconitifolius* Jacq. Obs. III, t. 52.

Locality.—Rawalpindi—Huzzoo (Ait. 570!).

Flowers.—October.

Distribution.—Himalayas to Ceylon, tropical region, upto 4,000 ft. in the north-west; native of India, generally cultivated.

141. *ATYLOSIA W. & A.*

265. *Atylesia scarabaeoides* Benth. Pl. Jungh. 243.

Locality.—Hoshiarpur (Ait. 631!).

Distribution.—China; Malaya; Mauritius; Madagascar. Universally spread in the plains throughout India.

266. *Atylosia crassa* Prain in Journ. As. Soc. Beng. 268, LXVI, 45432.

Locality.—Rawalpindi—Rajgarh (Parker 6504!).

Flowers.—December.

Distribution.—Java; Philippines. India—N.-W. Provinces, Bengal, S. India, Assam, Burma.

142. *CAJANUS DC.*

267. *Cajanus indicus* Spreng. Syst. III, 248.

Locality.—Hoshiarpur (* Ait. 582!).

* Seems indigenous in the low hills at Hoshiarpur with small leaves.

Distribution.—Everywhere in the tropics; probably native of the Old World.

143. *RYNCHOSIA* LOUR.

268. *Rhynchosia minima* DC. Prodr. II, 385.

Locality.—Jullandar—* Phillaur Plantation (7712 !); Hissar (Duthie 3953 !, 2908 !); Lahore (Stewart 2618 !); Lyallpur (Inayat !); Multan !; Rawalpindi (Ait. 214 !, 135 !); Hoshiarpur (Ait. 81 !).

Flowers.—August-February.

* Abundant in the P. Plantations. Stems sometimes woody at the base.

Distribution.—Cosmopolitan in the Tropics; Cape; United States; Ceylon. India—Rajputana, Sind and everywhere in the plains.

269. *Rhynchosia sericea* Spanoghe in Linnaea, xv, 105.

Locality.—Hoshiarpur (Ait. 465 !).

Distribution.—Malaya. India.

144. *FLEMINGIA* ROXB.

270. *Flemingia fruticulosa* Wall. Cat. n. 5754 = *strobilifera*.

Locality.—Dalhousie—(4742 !; Drum.'s Herb.).

Distribution.—Malaya. India.

271. *Flemingia congesta* Roxb. Hort. Beng. 56.

Variety.—*semialata*.

Locality.—Rawalpindi (Parker 7711 !).

Flowers.—June.

Distribution.—Malay Isles; China; Philippines; India. Ceylon.

145. *DALBERGIA* L. f.

272. *Dalbergia Sissoo* Roxb. Hort. Beng. 53.

Locality.—Rawalpindi (Ait. 395 !).

Flowers.—April.

Distribution.—Afghanistan; Baluchistan. Plains throughout India ascending to 5,000 ft. in the Central Himalaya.

146. *PONGAMIA* VENT.

273. *Pongamia glabra* Vent. Jard. Malm. t. 28.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14363 !, 13806 !, 14362 !, *13732 !, *13731 !, 13662 !, 38644 !, 13119 !); Hoshiarpur (Holland 11138 !); (Ait. 478 !).

Flowers.—April-May. *Fruits*.—January.

* Leaflets of different shape from ordinary form. Flowers much earlier at Lahore and is not easy to grow from seed. Suffers from cold and damp in winter, whereas ordinary *Pongamia* very hardy. Flowers more highly coloured, and petals and ovary more hairy (from Parker's notes).

Distribution.—Malaya Isles; N. Australia; Polynesia; Seychelles. India—Central and East Himalayas to Ceylon and Malacca.

147. *DERRIS* LOUR.

274. *Derris robusta* Benth. in Journ. Linn. Soc. IV, Suppl. 104.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38782 !, 38783 !, 13734 !, 13733 !)

Flowers.—April-August.

Distribution.—India—Eastern Himalayas, Western Peninsula. Ceylon.

148. *SOPHORA* L.

275. *Sophora mollis* Grah. in Wall. Cat. 5335.

Locality.—Rawalpindi (Ait. 396 !).

Flowers.—May.

Distribution.—India—Plains and low hills of the north-west; Hazara and Salt Range to Kumaon and Nepal, ascending to 4,000 ft.

276. *Sophora secundiflora* Lag. ex DC. Cat. Hort. Monsp. (1813) 148.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 18074!, 18073!, 13126!).
Fruits.—April-July.
Distribution.—Mexico.

149. CASTANOSPERMUM A. CUNN.

277. *Castanospermum australe* A. Cunn. & Fraser, in Hook. f. I, 556.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 13810!).
Flowers.—May.
Distribution.—Australia.

2. CAESALPINEAE.

150. CAESALPINIA L.

278. *Caesalpinia pulcherrima* Swartz Obs. 166.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 13614!).
Flowers.—January
Distribution.—Universally cultivated throughout India and elsewhere in the Tropics; the native country is not clearly known.

279. *Caesalpinia sepiaria* Roxb. Hort. Beng. 32.
Locality.—Hoshiarpur (Ait. 601!).
Distribution.—Malay Isles; China; Japan; and introduced in Tropical America. India.

280. *Caesalpinia Gilliesii* Wall. ex Hook. Bot. Misc. i (1830) 129.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 13611!, 13113!).
Flowers.—April-July.
Distribution.—South America.

281. *Caesalpinia coriaria* Willd. Sp. Pl. ii.; 532.
Locality.—Lahore—Ag. Hort. Gdns. (* Parker 14861!).
Flowers.—November.
 * Suffers from frost.
Distribution.—South America.

151. GLEDITSCHIA CLAYTON.

282. *Gleditschia triacanthos* L. Sp. Pl. 1056.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 143671!, 14366!, 12977!).
Flowers.—April.
Distribution.—North America.

152. PARKINSONIA L.

283. *Parkinsonia aculeata* L. Sp. Pl. (1753) 375.
Locality.—Kangra (Bisram 53113!); Lahore—Forest Office (Parker 12992!).
Flowers.—April. *Fruits*.—May.
Distribution.—Universally cultivated and often naturalized. A native of Tropical America.

153. CASSIA L.

284. *Cassia Fistula* L. Sp. Pl. (1753) 377.
Locality.—Rawalpindi (Ait. 397!); Gurdaspur (Bisram 846!).
Flowers.—July.
Distribution.—China; Malay Isles; Ceylon. India.

285. *Cassia Sophera* L. Sp. Pl. (1753) 379.

Locality.—Lahore—Changa Manga (Parker 24335 !, 24336 !, 24337 !); Ag. Hort. Gdns. (Parker 13736 !); Gurdaspur (Drum. 61 !).
Flowers.—May-December.

286. *Cassia Sophera* L. var. *purpurea* Roxb. Hort. Beng. 31.

Locality.—Lahore—Changa Manga (Parker 25743 !, 24334 !, 24333 !).
Flowers.—December.
Distribution.—As in *C. Sophera* L.

287. *Cassia Tora* L. Sp. Pl. (1753) 376.

Locality.—Hoshiarpur (* Parker 14378 !); Ait. 513 !; Rawalpindi (Ait. 1891 !).
Flowers.—August-September.
 * Abundant on grazing grounds and not eaten by cattle.
Distribution.—India. Ceylon; and the Tropics generally.

288. *Cassia bicapsularis* L. Sp. Pl. (1753) 376.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 37195 !, 37194 !).
Fruits.—January.
Distribution.—Tropical America.

289. *Cassia laevigata* Willd. Enum. Hort. Beng. 441.

Locality.—Lahore—Changa Manga (* Parker 19330 !, 19329 !).
Flowers.—May.
 * Cultivated.
Distribution.—Cosmopolitan in the Tropics.

290. *Cassia didymobotrya* Fresen. in Flora, XXII (1839) 53.

Locality.—Lahore—Changa Manga (Parker 1933 !).
Distribution.—Abyssinia. Cultivated.

291. *Cassia corymbosa* Lam. Encyc. i, 644.

Locality.—Lahore—Changa Manga (Parker 24234 !).
Fruits.—December.
Distribution.—America. Cultivated.

292. *Cassia mimosoides* L. Sp. Pl. 379.

Locality.—Rawalpindi—Barrakow (Ait. 398 !).
Fruits.—August.
Distribution.—Cosmopolitan in the Tropics; probably native in Asia only.
Distribution.—Southern Europe, Orient.

154. *CERATONIA* L.

293. *Ceratonia siliqua* L. Sp. Pl. 1026.

Locality.—Ferozepore—Fazilka (Parker 14374 !, 14373 !, 14375 !).
Flowers.—October.
Distribution.—Cosmopolitan in the Tropics, Ceylon, India.

155. *BAUHINIA* L.

294. *Bauhinia racemosa* Lam. Dict. I, 390.

Locality.—Hoshiarpur (Ait. 473 !).
Distribution.—Ceylon, China, Malay Isles, Timor. Throughout India.

295. *Bauhinia Vahlii* W. & A. Prodr., 297.

Locality.—Hoshiarpur (Ait. 517 !).
Distribution.—Throughout India in hilly districts.

296. *Bauhinia candicans* Benth. in Mart. Fl. Bras. XV. ii, 201.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38773 !).

Flowers.—August.

Distribution.—Brazil.

297. *Bauhinia corymbosa* Roxb. Hort. Beng. 31. Fl. Ind. ii, 329.

Flowers.—May.

Distribution.—China.

156. SCHOTIA JACQ.

298. *Schotia brachypetala* Sond. in Linnaea, XXIII (1850) 39.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13139 !).

Flowers.—April.

Distribution.—South Africa.

157. PIPTADENIA BENTH.

299. *Piptadenia nitida* Benth. in Journ. Bot. iv (1842) 336.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 39654 !, 39655 !, 39656 !).

Flowers.—April.

Distribution.—Brazil.

3. MIMOSEAE.

158. PROSOPIS L.

300. *Prosopis spicigera* L. Mantiss (1767) 68.

Locality.—Hissar (Duthie 3962 !).

Flowers.—October.

Distribution.—Afghanistan; Persia. India—Punjab, Rajputana, Sind. Bundelkhand and dry regions of W. Peninsula, Baluchistan.

301. *Prosopis juliflora* DC. Prodr. II, 447.

Variety.—*glandulosa* Sarg.

Locality.—Lahore—Forest Office (* Parker 13624 !, 13133 !, 12973 !, 12945 !): Changa Manga (7904 !).

Flowers.—April-May; Fruits.—May-June.

* Original seed from Mexico.

Distribution.—Tropical America.

302. *Prosopis juliflora* DC. Prod. II, 447.

Variety.—*velutina* Sarg.

Locality.—Lahore—Forest Office (* Parker 17188 !, 17187 !, 17186 !, 23988 !).

Flowers.—June-July.

* Evergreen, seed from Mexico.

303. *Prosopis alba* Gieseb. in Goett. Abh XIX (1874) 131.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 408 !).

Original seed from Buenos Ayres.

Distribution.—Argentina.

159. DICHROSTACHYS DC.

304. *Dichrostachys nutans* Benth. in Hook. Journ. Bot. IV (1842) 353.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38637 !, 37128 !, 37127 !).

Flowers.—January-May.

Distribution.—Tropical Africa.

160. *DESMANTHUS WILLD.*

305. *Desmanthus virgatus* Willd. Sp. Pl. iv, 1047.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 7776!, 7777!, 4460!).

Flowers.—November.

* A naturalized weed.

Distribution.—North America. Western India.

161. *MIMOSA L.*

306. *Mimosa rubicaulis* Lam. Encyc. Menth. V. i. (1783) 20.

Locality.—Rawalpindi (Jerram 7897! alt. 3,000-5,000 ft., 7718!); (Ait. 147!); Hoshiarpur (Ait. 282!).

Flowers.—May-June.

Distribution.—Afghanistan. Throughout India.

307. *Mimosa acerbata* Benth. in Hook.—Journ. Bot. iv (1842) 378.

Locality.—Lahore—Changa Manga (Parker 21894!).

Flowers.—August.

Cultivated; Original seed from Argentina.

Distribution.—Brazil.

308. *Mimosa hamata* Willd. Sp. Pl. v 4. (1805) 1033.

Locality.—Hissar (Duthie 396!); Lahore—Changa Manga (Parker 20119!).

Flowers.—October.

Cultivated.

Distribution.—India—W. Peninsula.

309. *Mimosa himalayana* Gamble. in Kew Bull. 1920, 4.

Locality.—Lahore—Changa Manga (Parker 24425!, 24424!, 24426!).

Flowers.—December.

Distribution.—India.

162. *LEUCAENA BENTH.*

310. *Leucaena glauca* Benth. in Hook. Journ. Bot. iv. 416.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14376!).

Flowers.—September.

Distribution.—Spread throughout India, as it is through Tropical Asia and Africa, but probably indigenous in Tropical America.

163. *ACACIA WILLD.*

311. *Acacia Farnesiana* Willd. Sp. Pl. V. 4 (1805) 1083.

Locality.—Rawalpindi (Ait. 570!).

Flowers.—December.

Distribution.—Cosmopolitan in the Tropics, often planted.

312. *Acacia arabica* Willd. Sp. Pl. V. 4 (1805) 1085.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38848!); Changa Manga—(Parker 18077!, 18078!, 18079!, 18080!, 18032!, 18034!, 18035!, 18036!, 18037!, 18033!, 18038!); Multan (Monro 35!); Rawalpindi (Ait. 148!).

Flowers.—April-September.

Grown from seed supplied by Vilmorin Paris as *A. Nilotica*. In Lahore it flowers at the same time as the local variety and has the same pods (Parker).

Distribution.—Ceylon, Arabia, Egypt, Tropical Africa, Natal. Throughout the greater part of India.

313. *Acacia eburnea* Willd. Sp. Pl. V. 4 (1805) 1081.
Locality.—Rawalpindi (Ait. 481, 399!; Parker 24015!).
Flowers.—April-September.
Distribution.—Arabia, Afghanistan. Throughout India in dry districts, Ceylon.
314. *Acacia leucophloea* Willd. Sp. Pl. V. 4 (1805) 1083.
Locality.—Lahore—Changa Manga (Parker 14326!, 14325!); Hoshiarpur (Ait. 523!).
Flowers.—September.
Distribution.—Malay Isles, Timor. Throughout India in dry districts.
315. *Acacia Catechu* Willd. Sp. Pl. V. 4 (1805) 1079.
Locality.—Hoshiarpur (Ait. 524!); Rawalpindi (Ait. 188!).
Flowers.—September.
Distribution.—India (Punjab, N.-W. Himalayas, Central India, Berar, Gurgaon, Burma); often planted.
316. *Acacia modesta* Wall. Pl. As. Rar. t. 130.
Locality.—Rawalpindi (7716!; Ait. 400!).
Flowers.—April-December.
Distribution.—Afghanistan. India (Western and Central Himalayas).
317. *Acacia torta* Craib in Kew. Bull. 1915, 410=Mimosa torta.
Locality.—Hoshiarpur (Ait. 516!).
Distribution.—Asia and Tropical Africa.
318. *Acacia aneura* F. Muell in Linnaea XXVI (1853-55) 627.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 38631!).
Flowers.—May.
Distribution.—Australia.
319. *Acacia auriculaeformis* A. Cunn. ex. Benth, in Hook Lond. Journ. Bot., i (1842) 377.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 37258!, 17192!).
Flowers.—October; *Fruits*.—January.
Distribution.—Australia.
320. *Acacia bonariensis* Gill. in Hook. Bot. Misc. iii (1833) 207.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 38632!, 37257!, 33099!).
Flowers.—May-August.
Seed from Formosa.
Distribution.—Argentine.
321. *Acacia confusa* Merrill in Philipp. Journ. Sec. v, 27 (1910).
Locality.—Lahore—Ag. Hort. Gdns. (Parker 38632!, 37257!, 21044!).
Flowers.—April-May; *Fruits*.—January.
Distribution.—Philippine Islands.
322. *Acacia constricta* Benth. in A. Gray. Pl. Wright i. 66.
Locality.—Lahore—Ag. Hort. Gdns. (Parker 14884!).
Flowers.—April; Sweet scented.
A struggling shrub. Introduced from Mexico.
Distribution.—North Mexico.
323. *Acacia filicina* Willd. Sp. Pl. iv. 1072.
Locality.—Lahore—Changa Manga (* Parker 24231!); Ag. Hort. Gdns. (Parker 13647!, 13646!, 13645!, 13644!, 12943!, 11444!).
Flowers.—April-June. *Fruits*.—December-February.
* Cultivated. A shrub 6 ft. high; seed from Mexico.
Distribution.—Mexico.

324. *Acacia homalophylla* A. Cunn. ex Benth. in Hook. Journ. Bot. i (1842) 365.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14885 !, 11548).

Flowers.—January.

Distribution.—Australia.

325. *Acacia sphaerocephala* Cham. Schlecht in Linnaea V (1830) 594.

Locality.—Lahore—Government House Gdns. (* Parker 15039 !).

Flowers.—May.

* Spines $2\frac{1}{2}$ in. long and $\frac{1}{2}$ in. broad. Extraordinarily large.

Distribution.—Mexico.

326. *Acacia spadicigera* Cham. & Schlecht in Linnaea V (1830) 594.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 15041 !).

Flowers.—May.

Distribution.—Jamaica.

164. *CALLIANDRA BENTH.*

327. *Calliandra grandiflora* Benth. in Hook. Journ. Bot. II (1840) 139.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38887 !, 13670 !, 11457 !).

Flowers.—May-August; *Fruits*.—February.

Distribution.—Tropical America.

165. *ALBIZZIA DURAZZ.*

328. *Albizzia Lebbeck* Benth. in Hook. Lond. Journ. Bot. V. 3 (1844) 87.

Locality.—Rawalpindi (Ait. 240 !, 401 !).

Flowers.—May.

Distribution.—Tropical and subtropical Asia and Africa. Throughout India. Usually planted.

329. *Albizzia odoratissima* Benth. in Hook. Journ. Bot. V. 3 (1844) 88.

Locality.—Rawalpindi—Saligraon (Parker 7713 !); Gurdaspur-Dhunera (Bisram 302 !).

Fruits.—February.

Distribution.—Throughout India. Ceylon.

330. *Albizzia mollis* Boiv. in Encyc. XIX. Siecle, II. 33.

Locality.—Dalhousie 3,000-5,000 ft. (Drum. 22 !).

Flowers.—August.

Distribution.—Tropical Africa.

331. *Albizzia stipulata* Boiv. in Encyc. du xix Siecle, V 2, 33.

Locality.—Dalhousie.

Distribution.—S.-E. Asia. Throughout India.

166. *PITHECOLOBIUM MART.*

332. *Pithecolobium dulce* Benth. in Hook. Journ. 1844, 199.

Locality.—Lahore—Ag. Hort. Gdns.—(Parker 13125 !); Forest Office (Parker* 14882 !, ** 17185 !).

Flowers.—April-May; *Fruits*.—July.

* Grown from Mexican seed.

** Seed from Esperanza, Sonora, Mexico. A frost-hardy form.

Distribution.—A native of Tropical Africa. Ceylon; Malay Isles; Philippines. Cultivated throughout India, but not indigenous.

XLII. ROSACEAE.

167. PRUNUS L.

333. *Prunus communis* Huds.

Locality.—Rawalpindi (Ait.!).

Flowers.—February.

Distribution.—India.—W. temperate Himalaya, cultivated, or indigenous from Gharwal to Kashmir, alt. 5-7,000 ft.

168. SPIRAEA L.

334. *Spiraea prunifolia* Sieb & Zucc. Fl. Jap. I, 131.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14879!, 11455!).

Flowers.—February. 2-3 ft. high.

Distribution.—Japan.

169. RUBUS L.

335. *Rubus fruticosus* L. Sp. Pl. 493.

Locality.—Rawalpindi—(Jerram 8086!, 8085!).

Flowers.—June.

Distribution.—Europe.

170. ROSA L.

336. *Rosa multiflora* Thunb. Fl. Jap. 214.

Locality.—Lahore.—Ag. Hort. Gdns. (Parker 12955!).

Flowers.—April.

Distribution.—Japan; China.

171. PYRUS L.

337. *Pyrus communis* L. Sp. Pl. 479.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 12991!).

Flowers.—April.

A French variety which ripens its fruits in the plains. Most do not.

Distribution.—N. Persia westwards to S. Europe. India—Cultivated in the N.-W. Himalayas, alt., 2-8,000 ft.

172. CRATAEGUS L.

338. *Crataegus saligna* Greene, Pittonia III, 99.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14845!, 14244!).

Distribution.—North America.

173. COTONEASTER L.

339. *Cotoneaster microphylla* Wall. Cat. 662 A.

Locality.—Rawalpindi (Jerram 8064!, 6,500 ft.)

Flowers.—June.

Distribution.—India—temperate Himalaya, alt. 4-8,000 ft.

XLIII. SAXIFRAGACEAE.

174. DEUTZIA THUNB.

340. *Deutzia staminea* R. Br. in Wall. Pl. As. Rar 82, t. 191.

Locality.—Rawalpindi—alt. 5,500 ft. (Jerrum 7902!).

Flowers.—May.

Distribution.—India—temperate W. Himalayas to Kashmir, alt. 5-9,000 ft., common.

XLIV. HAMAMELIDACEAE.

175. *FARROTIA* C.A. MEY.

341. *Parrotia Jacquemontiana* Dene. in Jacq Voy. Bot. t. 82.

Locality.—Rawalpindi 8,000 ft. (Ait. 1211).

Flowers.—May.

Distribution.—India—Kashmir, alt. 5-9,000 ft., common.

XLV. COMBRETACEAE.

176. *TERMINALIA* L.

342. *Terminalia belerica* Roxb. Cor. Pl. V, 2 (1798) 54, t. 198.

Locality.—Hoshiarpur (Ait. 4881).

Distribution.—Ceylon, Malaya. Throughout India except Sind and desert region of the west.

343. *Terminalia Arjuna* Bedd. Fl. Sylv. t. 28.

Locality.—Hoshiarpur (Ait. 5381).

Distribution.—India—sub-Himalayan tracts of the N.-W. Provinces, W. Peninsula; Ceylon.

177. *ANOGEISSUS* WALL.

344. *Anogeissus latifolia* Wall. Cat. (1828) 4015.

Locality.—Kangra 9733!

Flowers.—November.

Distribution.—Throughout the greater part of India; Ceylon.

178. *COMBRETUM* L.

345. *Combretum coccineum* Lamk Encyc. I 734.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13674!).

Flowers.—May.

Distribution.—Madagascar; Mauritius.

179. *CALLISTEMON* R.Br.

346. *Callistemon coccineus* F. Muell Fragm. I, 13.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 137381!).

Flowers.—April. Deep crimson.

Distribution.—Australia.

XLVI. MYRTACEAE.

180. *MELALEUCA* L.

347. *Melaleuca Leucadendron* L.

Locality.—Lahore—Ravi Park (Parker 38643!); Ag. Hort. Gdns. (Parker 13128!).

Flowers.—April-May.

Distribution.—Malay Islands to Australia.

181. *EUCALYPTUS* L' HERIT.

348. *Eucalyptus bicolor* A. Cunn. ex Hook. in Mitch. Journ. Austral. 390.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 11445!, 11547! 38680!, 38679!, * 38678!); Lawrence Gdns. (Parker 22420!).

Flowers.—May.

* From French seed sown in April.

Distribution.—Australia.

349. **Eucalyptus affinis** Deane & Maiden in Proc. Linn. Soc. N. S. Wales XXIV 454.

Locality.—Lahore (Parker 22462!).

Seedling grown in Lahore from Australian seed.

Distribution.—Australia.

350. **Eucalyptus Bosistoana** F. Muell.

Locality.—Lahore (* Parker 22459!).

* Seedling grown in Lahore from Australian seed.

Distribution.—Australia.

351. **Eucalyptus cornuta** Labill. Voy. I, 403 t. 20.

Locality.—Lahore—Lawrence Gdns. (Parker 22481!).

Distribution.—Australia.

352. **Eucalyptus foecunda** Schau. Lehm. Pl. Preiss I, 130.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38672!, 38671!, 38670!, 14866!).

Flowers.—May.

* Seed from W. Australian Forest Dept., sown April 1912, planted August 1912. Flowering as a shrub 3 ft. high in February 1916.

Distribution.—Australia.

353. **Eucalyptus gomphocephala** DC. Prod. III, 220.

Locality.—Lahore—Lawrence Gdns. (Parker 22482!).

Distribution.—Australia.

354. **Eucalyptus crebra** F. Muell. in Journ. Linn. Soc. III (1859) 87.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38865!); Lawrence Gdns. (Parker 22429!); Changa Manga (Parker 14871!, 14870!); Amritsar—Ram Bagh (Parker 4479!, 22430!); Kangra (Parker 22438!); Gurdaspur—Madhopur (Parker 14342!, 14343!, 14344!, 14339!, 14340!, 14341!).

Flowers.—November-May.

Distribution.—Australia.

355. **Eucalyptus Leucoxydon** F. Muell. in Trans. Vict. Inst. I (1855) 33.

Locality.—Lahore (Parker 4439!); Lawrence Gdns. (* Parker 22470!).

* Seedling from Vilmorin's seed.

Distribution.—Australia.

356. **Eucalyptus microcorys** F. Muell. Fragm. II, 50.

Locality.—Lahore—Lawrence Gdns. (Parker 22483!).

Distribution.—Australia.

357. **Eucalyptus hemiphloia** F. Muell. Fragm. II, 62.

Locality.—Lahore—(Parker 22492!); Ag. Hort. Gdns. (Parker 38668!); Lawrence Gdns. (Parker 22491!); Kot. Lakhpat (Parker 14338!, 14345!).

Distribution.—Australia.

358. **Eucalyptus siderophloia** Benth. Fl. Austral III, 220.

Locality.—Lahore—(** Parker 4454!; Changa Manga—Parker 5956!, 4478!, 22477!); Lawrence Gdns. (* Parker 22478!).

Flowers.—April.

* Seedling from Vilmorin's seed.

** Seedling from Australian seed.

Distribution.—Australia.

359. *Eucalyptus Kirtoniana* F. Muell. Eucalyptogr. DEC. I (1879) in obs.; Sub. E. resinifera.

Locality.—Lahore (* Parker 22506, 6112!, ** 4457!; Lawrence Gdns. * Parker 22505!, 22504!).

Flowers.—December.

* From sucker shoots. ** Seedling from Australian seed.

Distribution.—Australia.

360. *Eucalyptus patentinervis* R. T. Baker in Proc. Linn. Soc. N. S. Wales XXIV—602.

Locality.—Lahore (* Parker 22461!).

* Seedlings from Australian seed.

Distribution.—Australia.

361. *Eucalyptus radis* Endl. in Enum Pl. Hueg. 49.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 6377!, 38842!, 38841!); (* Mustoe 580!).

Flowers.—August.

* Sown spring 1911. Flower buds September 1913.

Distribution.—Australia.

362. *Eucalyptus rostrata* Schlecht in Linnaea XX (1847) 665.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38771!, 38844!, *38665!), Lawrence Gdns. (Parker 22447!, 22448!).

Flowers.—May-August.

* Seed from France as 'Foeld Bay'.

Distribution.—Australia.

363. *Eucalyptus platyphylla* F. Muell in Journ. Linn. Soc. (1859) 93.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 21039!, 38682!); Changa Manga (Parker 19340!).

Flowers.—April-May.

Distribution.—Australia.

364. *Eucalyptus microtheca* F. Muell in Journ. Linn. Soc. III, (1858) 87.

Locality.—Lahore—Lawrence Gdns. (Parker 22469!); Changa Manga (Parker 17184!, 17183!, 17182!, 17181!, 17180!).

Flowers.—July-August.

From seed supplied by the Bot. Gdns. Sydney.

Distribution.—Australia.

365. *Eucalyptus polyanthemus* Schau. in Walp. Rep. II, 924.

Locality.—Lahore—Lawrence Gdns. (* Parker 22468!; 4438!).

From Vilmorin's seed.

Distribution.—Australia.

366. *Eucalyptus melanophloia* F. Muell. in Journ. Linn. Soc. III (1859) 93.

Locality.—Lahore—Lawrence Gdns. (Parker 22442!); Changa Manga (Parker 22443!, 22444!, 44771!).

Flowers.—May.

Distribution.—Australia.

367. *Eucalyptus tereticornis* Sm. Bot. N. Holl. 41.

Locality.—Lahore—Lawrence Gdns. (Parker 6150!); Ag. Hort. Gdns. (Parker 38843!, 38693!); Changa Manga (Parker 22456!).

Flowers.—April-August.

Distribution.—Australia.

368. *Eucalyptus paniculata* Sm. in Trans. Linn Soc. III (1797) 287.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 3868 !); Changa Manga (Parker 22422 !, 22421 !, 5957 !); Kot Lakhat (Parker 14868 !).

Flowers.—February-May.

Distribution.—Australia.

369. *Eucalyptus loxophleba* Benth. Fl. Austral. III, 252.

Locality.—Lahore—Lawrence Gdns. (* Parker 22485 !, 4451 !).

* Seedling from Australian seed.

Distribution.—Australia.

370. *Eucalyptus ochrophloia* F. Muell. Fragm. XI. 36.

Locality.—Lahore—(Parker 4452 !); Ag. Hort. Gdns. (Parker 38683 !, 38684 !).

Flowers.—May.

* Seedling from Australian seed.

Distribution.—Australia.

371. *Eucalyptus oleosa* F. Muell. Fragm. II, 56.

Locality.—Lahore (* Parker 4453 !); Ag. Hort. Gdns. (Parker 1544 !).

* Seedling from seed from W. Australia Forest Dept.

Flowering 4 ft. high.

Distribution.—Australia.

372. *Eucalyptus citriodora* Hook. in Mitch. Journ. Trop. Austral. 235.

Locality.—Lahore—Lawrence Gdns. (Parker 22489 !).

Flowers.—May.

Distribution.—Australia.

373. *Eucalyptus platypus* Hook. Ic. Pl. t. 849.

Locality.—Lahore—Ag. Hort. Gdns. (* Parker 11546 !).

Flowers.—February; flowering 3 ft. high.

Distribution.—Australia.

374. *Eucalyptus redunca* Schau. in Lehm. Pl. Preiss I, 127.

Locality.—Lahore (* Parker 22471 !, 4442 !).

* Seedling from seed from Vilmerin.

Distribution.—Australia.

375. *Eucalyptus resinifera* Sm. in White, Journ. Voy. N.-S. Wales 231.

Locality.—Lahore—Lawrence Gdns. (* Parker 22480 !).

Distribution.—Australia.

376. *Eucalyptus salmonophloia* F. Muell. Fragm. XI, 11.

Locality.—Lahore (* Parker 4441 !).

* Seedling from Australian seed.

Distribution.—Australia.

377. *Eucalyptus salubris* F. Fragm. XI, II.

Locality.—Lahore (Parker 22460 !, 22496 !, 4443 !).

Seedling from Australian seed.

Distribution.—Australia.

378. *Eucalyptus Trabuti* Vilm.

Locality.—Lahore—Ag. Hort. Gdns. (Gdns. Overseer 39760 !, 39761 !, 39762 !, 39763 !); (Parker 38866 !, 38772 !, 38770 !); Lawrence Gdns. (* Parker 22465 !).

Flowers.—April-August.

* Seedling from Vilmerin's seed.

379. **Eucalyptus uncinata** Turcz. in Bull. Soc. Nat. Mosc. XXII (1849) II, 23.

Locality.—Lahore (* Parker 4437!).

* Seedling from Vilmorin's seed.

Distribution.—Australia.

380. **Eucalyptus populifolia** Hook. Ic. Pl. t. 879.

Locality.—Lahore—Lawrence Gdns. (* Parker 22487!, 22486!, 4449!).

Seedling from Australian seed.

Distribution.—Australia.

381. **Eucalyptus exerta** F. Muell in Journ. Linn. Soc. III (1859) 85.

Locality.—Lahore (Parker 22463!, 4459!).

Seedling from Australian seed.

Distribution.—Australia.

382. **Eucalyptus melliodora** A. Cunn. ex Schau in Walp. Rep. II, 924.

Locality.—Lahore—Lawrence Gdns. (Parker 22484!).

Distribution.—Australia.

182. PSIDIUM L.

383. **Psidium cattleianum** Sabine in Trans. Hort. Soc. IV, 1822, 317. t. 11.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13725!).

Flowers.—April.

Distribution.—Brazil.

384. **Psidium pumilum** Vahl. Symb. Bot. II, 56.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13668!, 15046!).

Flowers.—May.

Distribution.—Tropical America.

183. MYRTUS L.

385. **Myrtus communis** L. Sp. Pl. (1753) 471.

Locality.—Rawalpindi (Ait. 403!).

Flowers.—May.

Distribution.—A native of S. Europe.

184. EUGENIA L.

386. **Eugenia jambolana** Lam. Encyc. III Method (1789) 198.

Locality.—Rawalpindi (Ait. 124!).

Flowers.—August.

Distribution.—Ceylon; Malaya; Australia. Throughout India.

387. **Eugenia bracteata** Roxb. Hort. Beng. (1814) 37.

Locality.—Lahore—Ag. Hort. Gdns. (6779!; Parker 13116!).

Flowers.—April. *Fruits*.—December.

Distribution.—S. India. Ceylon.

388. **Eugenia uniflora** L.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13737!).

Fruits.—April.

Distribution.—A native of S. America, becoming naturalized in Ceylon and parts of India.

XLVII. LYTHRACEAE.

185. AMMANNIA L.

389. *Ammannia baccifera* L. Sp. Pl. (1762) 175.

Locality.—Hoshiarpur (Ait. 611!).

Distribution.—Tropical Africa; Afghanistan; Ceylon; China; Malaya; Australia. Throughout India in moist places.

186. WOODFORDIA SALISB.

390. *Woodfordia floribunda* Salisb. Parad. Lond. (1806) t. 42.

Locality.—Dalhousie (Drum's Hort. 296!); Rawalpindi (Ait. 404!).

Flowers.—March.

Distribution.—Tropical Africa; Madagascar; China; Japan; Sumatra. Throughout India. Ceylon; Baluchistan.

187. NESAEA COMM.

391. *Nesaea myrtifolia* Chas.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13132!, 6778!, 6777!, 13788!).

Flowers.—May.

Distribution.—Brazil.

188. LAWSONIA L.

392. *Lawsonia alba* Lamk. Ill. t. 296, fig. 2.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13671!); Multan (Monro 312!).

Flowers.—April-June.

Distribution.—Kabul; Persia. Cultivated in many tropical and warm temperate regions. Throughout India, very common, cultivated; perhaps wild in W. India.

189. LAGERSTROEMIA L.

393. *Lagerstroemia Flos-Reginae* Retz. Obs. V. 25.

Locality.—Gurdaspur (Fane 4857!).

Flowers.—June.

Distribution.—Malaya, China. India—from Bombay southwards.

394. *Lagerstroemia floribunda* Jack. in Mal. Misc. I, 38.

Locality.—Lahore—Ag. Hort. Gdns. (Porder 38831!, *14365!).

Flowers.—August-October.

* Colour—rose fading to white.

Distribution.—Siam; Malaya; China.

395. *Lagerstroemia anisoptera* Koehe.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38634!, 37122!).

Flowers.—January-May; Colour white.

XLVIII. ONAGRACEAE.

190. EPILOBIUM L.

396. *Epilobium roseum* Schreb.

Locality.—Rawalpindi (Ait. 71!).

Flowers.—September.

Distribution.—West Asia; Europe. India—temperate Himalaya, at 5-11,000 ft., common.

191. *TRAPA* L.

397. *Trapa bispinosa* Roxb. Cor. Pl. 234.

Variety.—*incisa* Wall.

Locality.—Hoshiarpur (Ait. 422 !).

Distribution.—S.-E. Asia, Malaya, Tropical Africa. Throughout India cultivated. Ceylon.

XLIX. SAMYDACEAE.

192. *CASEARIA* JACQ.

398. *Casearia tomentosa* Roxb. Fl. Ind. II (1832) 421.

Locality.—Hoshiarpur (Ait. 503 !).

Distribution.—Ceylon; Malaya; N. Australia. Throughout India.

L. PASSIFLORACEAE.

193. *PASSIFLORA* L.

399. *Passiflora lunata* Willd. Sp. Pl. III, 612.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 15038 !).

Flowers.—October.

Distribution.—Tropical America.

400. *Passiflora caerulea-racemosa* Sab.

Locality.—Lahore—Changa Manga (Parker 19327 !).

Flowers.—May; Purple.

Cultivated.

LI. CUCURBITACEAE.

194. *TRICHOSANTHES* L.

401. *Trichosanthes cucumerina* L. Sp. Pl. (1753) 1008.

Locality.—Hoshiarpur (Ait. 509).

Distribution.—Ceylon; Malaya; N. Australia. Throughout India.

195. *MOMORDICA* L.

402. *Momordica dioica* Roxb. Fl. Ind. III, 709.

Locality.—Rawalpindi (Ait. 408 !, 196 !, 195 !, 194 !); Hissar (Duthie 4036 !).

Flowers.—July-September.

Distribution.—Ceylon; Malaya Throughout India.

196. *CUCUMIS* L.

403. *Cucumis trigonus* Roxb. Fl. Ind. II, 722.

Locality.—Rawalpindi (Ait. 192 !).

Flowers.—September.

Distribution.—Ceylon; Malaya; N. Australia; Afghanistan; Persia. Throughout India.

404. *Cucumis Melo* L. Sp. Pl. (1753) 1011.

Locality.—Rawalpindi (Ait. 4091).

Flowers.—July-September.

Distribution.—Throughout India cultivated. Cultivated in most hot countries.

197. CITRULLUS SCHRADER.

405. *Citrullus Colocynthis* Schrader in Linnaea V. 12 (1838) 414.

Locality.—Sandy grounds near Jaito (Duthie 4034!).

Flowers.—August.

Distribution.—Ceylon; W. Asia; Arabia; Baluchistan. Throughout India, wild or sparingly cultivated.

406. *Citrullus vulgaris* Schrader in Linnaea 1848, 412.

Locality.—Rawalpindi (Ait. 410!); Lahore (2943 Brandis Herb).

Flowers.—July.

Distribution.—Throughout India, cultivated. In all warm countries of the world, cultivated.

198. CEPHALANDRA SCHKADER.

407. *Cephalandra indica* Naud. in Ann. Sc. Ser. 5, V, 16.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38822!).

Flowers.—August.

Naturalized in these gardens.

Distribution.—Malaya, Africa. Throughout India, common.

LII. CACTACEAE.

199. OPUNTIA TOURN.

408. *Opuntia Dillenii* Haw. Suppl. Pl. Succ. 79.

Locality.—Rawalpindi (Ait. 1067!).

Flowers.—February.

Distribution.—S. America.

LIII. FICOIDEAE.

200. TRIANTHEMA L.

409. *Trianthema crystallina* Vahl. Symb. I, 32.

Locality.—Multan 31!; Lahore (Cleghorn 2646!; Stewart 2900). Rawalpindi—on salt ground (Ait. 580!).

Flowers.—October.

On clayey hard soil. Fodder for goats.

Distribution.—Throughout Africa. India—Punjab.

410. *Trianthema pentandra* L. Mant. 79.

Locality.—Hissar (Duthie 4041!); Lahore (2662! Brandis Herb); Multan (Monro 261!). Rawalpindi (Ait. 411!, 412!).

Flowers.—April-August.

Distribution.—Tropical Africa. India—Punjab, N.-W. Provinces, Sind, W. Peninsula.

201. MOLLUGO L.

411. *Mollugo hirta* Thunb. Fl. Cap. 120.

Locality.—Lahore (Stewart 2566!); Hoshiarpur (Ait. 605!); Multan (Monro 233!).

Flowers.—March.

Distribution.—Throughout India, common. Ceylon; warmer regions of the world.

412. *Mollugo nudicaulis* Lamk. Dict. IV, 234.

Locality.—Multan (Monro 31!, 232!); Rawalpindi—Barrakow (Ait. 413!).

Flowers.—October.

Distribution.—Ceylon; New Caledonia; Tropical Africa and Cuba. India—Punjab and hotter and drier parts,

LIV. UMBELLIFERAE.

202. *CARUM L.*

413. *Carum Bulbocastanum* G. D. J. Koch. in Nov. Ait. Acad. Caes. Leop. (1825) 121.

Locality.—Peshawar—College (Quizilbash 55!).

Distribution.—Baluchistan; N. Asia; Europe; N. Africa.

414. *Carum anethifolium* Benth. in gen. Pl. I, 89.

Locality.—Dalhousie (179! Drum's Herb.).

Distribution.—India—Almora, alt. 5,000 ft.; Nepal.

203. *ANETHUM TOURN.*

415. *Anethum graveolens* L. Sp. Pl. 263.

Locality.—Lahore (Stewart 2546!).

Distribution.—Cultivated in S. Europe and W. Asia. Throughout tropical and subtropical India.

204. *FOENICULUM ADANS.*

416. *Foeniculum vulgare* Gaertn. Fruct. I, 105, t. 23, fig. 5.

Locality.—Rawalpindi (Ait. 417!).

Flowers.—April.

Distribution.—Commonly cultivated throughout India, alt. 0-6,000 ft., often appearing wild.

205. *OENANTHE L.*

417. *Oenanthe stolonifera* Wall. Cat. 585.

Locality.—Rawalpindi (Ait. 118!).

Flowers.—September.

Distribution.—Java; China and Japan. Northern India from Kashmir and the Punjab to Assam, alt. 0-5,000 ft. frequent; common in the plains of Bengal.

206. *HERACLEUM L.*

418. *Heracleum candicans* Wall. Cat. 573.

Locality.—Dalhousie (Drum 328!); Kangra (Jameson 3354!).

Flowers.—February.

Distribution.—India—Kashmir to Kumaon alt. 6-12,000 ft., common.

207. *CORIANDRUM L.*

419. *Coriandrum sativum* L.

Locality.—Rawalpindi (Ait. 414!); Lahore (Stewart 2547!).

Flowers.—March.

Distribution.—Throughout India, cultivated.

208. *CAUCALIS L.*

420. *Caucalis leptophylla* L.

Locality.—Peshawar College (Quizilbash 18!).

Distribution.—W. Asia; S. Europe; N. Africa. India—Punjab.

209. *PSAMMOGETON EDGW.*

421. *Psammogeton biternatum* Edgew. in Trans. Linn. Soc. XX, 57.

Locality.—Lyallpur—(Inayat!).

Distribution.—Baluchistan; Kabul; Persia. India—Punjab, Sind.

422. *Psammogiton canescens* Valke.

Locality.—Peshawar (1028!); Lahore (2904).

Flowers.—March-April.

LV. ARALIACEAE.

210. HEPTAPLEURUM GAERTN.

423. *Heptapleurum venulosum* Seem. Rev. Heder. 44.

Locality.—Hoshiarpur (Ait.).

Distribution.—Malaya; Tropical Australia. Throughout India.

211. HEDERA L.

424. *Hedera Helix* L.

Locality.—Rawalpindi (Ait. 138! alt. 5000); Patiala State (Jannujee 10!).

Distribution.—W. Europe to Japan.

LVI. CORNACEAE.

212. CORNUS L.

425. *Cornus oblonga* Wall. Roxb. Fl. Ind. ed. Carey & Wall. I, 432.

Locality.—Rawalpindi—Dhirkot alt. 3500-4500 (Jerram 7475! 7474!, 7473!, 7354!).

Flowers.—March.

Distribution.—India—Jhelum to Nepal, alt. 4-7,000 ft. frequent; Bhutan.

LVII. CAPRIFOLIACEAE.

213. VIBURNUM L.

426. *Viburnum cotinifolium* Don. Prodr. 141.

Locality.—Dalhousie (4627! Drum's Herb.).

Distribution.—India—Kashmir to Kumaon alt. 6-11,000 ft.

427. *Viburnum stellulatum* Wall. Pl. As. Rar II, 54, t. 169.

Locality.—Dalhousie (4626! Drum's Herb.); Rawalpindi alt. over 6,000 ft. (Jerram 8269!).

Flowers.—July.

Distribution.—India—Temp. Himalaya alt. 6-11,000 ft., Kashmir to Sikkim, common.

428. *Viburnum coriaceum* Blume. Bijl., 656.

Locality.—Rawalpindi—alt. 3,500-4,500 ft. (Jerram—7469!, 7470!).

Flowers.—March.

Distribution.—Java. India—Temperate Himalaya; N. Burma.

214. LONICERA L.

429. *Lonicera quinquelocularis* Hardwick in As. Res. VI, 351.

Locality.—Rawalpindi (Jerram 7782!).

Flowers.—April.

Distribution.—India—temperate Himalayas, Kashmir to Kumaon alt. 8-13,000 ft., frequent.

430. *Lonicera sempervirens* L. Sp. Pl. 173.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 11459!).

Flowers.—February.

Distribution.—North America.

LVIII. RUBIACEAE.

215. *STEPHEGYNE KORTH.*

431. *Stephegyne parvifolia* Korth in Verh. Gesch. Nat. Bot. 161.

Locality.—Kangra (9739 !).

Flowers.—June.

Distribution.—Throughout drier parts of India. Ceylon.

216. *WENDLANDIA BARTL.*

432. *Wendlandia exerta* DC. Prodr. IV, 411.

Locality.—Rawalpindi (Lehtrar 9744 !); Kangra (9740 !).

Flowers.—May.

Distribution.—India—dry forests of tropical Himalaya, Orissa, C. India, N. Deccan, Konkan.

433. *Wendlandia puberula* DC. Prodr. IV, 412.

Locality.—Rawalpindi (Alt. 4,300 ft. Jerram, 723 !).

Distribution.—India—dry forests of tropical Himalaya, from Gharwal to Nepal, alt. 0-4,000 ft.).

217. *RANDIA L.*

434. *Randia tetrasperma* Roxb. Fl. Ind. I, 709 (Gardenia).

Locality.—Rawalpindi—Seribari 4,500 ft. (Jerram 7891 !).

Distribution.—India—Kashmir and subtropical Himalaya; Sikkim; Bhootan

218. *GARDENIA L.*

435. *Gardenia Thunbergia* L. f. Suppl. 162.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13608 !, 13623 !).

Flowers.—June.

Distribution.—South Africa.

219. *PAVETTA L.*

436. *Pavetta indica* L. Sp. Pl. (1753) 110.

Locality.—Rawalpindi—Kam Rat (Jerram 6752 !).

Distribution.—Malay Archipelago; S. China; N. Australia. Throughout India.

220. *HAMILTONIA ROXB.*

437. *Hamiltonia suaveolens* Roxb. Hort. Beng. 15.

Locality.—Rawalpindi (Alt. 1061 !).

Flowers.—March.

Distribution.—China. India—tropical and subtropical Himalayas, C. India, W. Peninsula.

221. *LEPTODERMIS WALL.*

438. *Leptodermis lanceolata* Wall. in Roxb. Fl. Ind. ed. Carey & Wall. II, 191.

Locality.—Dalhousie (Drum's Herb. 383 !, 384 !).

Distribution.—India—Temperate Himalaya.

439. *Leptodermis parkeri* Dunn. in Kew Bull. 1920, 206.

Locality.—Dalhousie (385 ! Drum's Herb.).

Distribution.—India.

222. SERISSA COMM.

440. *Serissa foetida* Lamk. Illustr. II, 211.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 12962!).

Flowers.—April.

Distribution.—China, Japan.

223. SPERMACOCE L.

441. *Spermacoce hispida* L. Sp. Pl. (1753) 102.

Locality.—Hoshiarpur (Ait. 606!).

Distribution.—S. China; Malay Archipelago. Throughout India.

224. GALIUM L.

442. *Galium Aparine* L.

Locality.—Hoshiarpur (Ait. 353!); Rawalpindi (Ait. 194!).

Flowers.—March.

Distribution.—Europe; N. Africa; N. and W. Central Asia. India—Temperate Himalaya.

443. *Galium tricornis* With.

Locality.—Peshawar College (Quizilbash 9!).

Distribution.—Central and S. Europe, N. Africa; W. Asia. India—Western Himalaya.

LIX. VALERIANACEAE.

225. FEDIA GAERTN.

444. *Fedia sclerocarpa* Fisch. & Mey.

Locality.—Hoshiarpur (*Ait. 628!).

* A common garden weed at Hoshiarpur, Jhelum and Rawalpindi.

LX. DIPSACEAE.

226. SCABIOSA L.

445. *Scabiosa Olivieri* Coult. Dips. 36 t. 2, fig. 10.

Locality.—Rawalpindi (Ait. 425!).

Flowers.—April.

Distribution.—Afghanistan to Armenia and Arabia. India—W. Punjab.

LXI. COMPOSITAE.

227. VERNONIA SCHREB.

446. *Vernonia cinerea* Less. in Linnaea IV, 291, and VI, 673.

Locality.—Rawalpindi (Ait. 203!).

Flowers.—September.

Distribution.—Tropical Asia, Africa, Australia. Throughout India.

228. EUPATORIUM L.

447. *Eupatorium conyzoides* Vahl. Symb. Bot. III, 96.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14846!; 13726!).

Flowers.—May.

Seed from Mexico. Large perennial, more or less shrubby below, and grows vigorously.

Distribution.—Tropical and N. America,

229. *SOLIDAGO* L.

448. *Solidago Virga-aurea* L.

Locality.—Dalhousie (387! Drum's Herb.).

Distribution.—Europe; Temperate Asia and America; Hongkong. India—Temperate Himalaya.

230. *CYATHOCLINE* CASS.

449. *Cyathocline lyrata* Cass. in Ann. Sc. Nat., Ser. I, XVII. (1829) 420.

Locality.—Lahore—Ag. Hort. Gdns. (*Parker 21711); Rawalpindi (Ait. 459!).

Flowers.—November.

* Weed in moist places.

Distribution.—India.

231. *GRANGEA* FORSK.

450. *Grangea maderaspatana* Poir. Encyc. Method. Suppl. V. (1811) 825.

Locality.—Gurdaspur (453! Drum's Herb.).

Distribution.—Ceylon; tropical and subtropical Asia and Africa. Throughout India.

232. *MYRIACTIS* LESS.

451. *Myriactis nepalensis* Less.

Locality.—Dalhousie (411! Drum's Herb.).

Distribution.—Central Asia. India—Temperate Himalaya.

233. *ASTER* L.

452. *Aster Thomsoni* Clarke Comp. Ind. 48.

Locality.—Dalhousie (389! Drum's Herb.).

Distribution.—India—W. Himalaya.

234. *ERIGERON* L.

453. *Erigeron linifolius* Willd. Sp. Pl. III, 1955.

Locality.—Rawalpindi (Ait. 126!).

Flowers.—June. Weed.

Distribution.—Caledonia.

454. *Erigeron canadensis* L.

Locality.—Rawalpindi (Ait. 198!); Lahore—Changa Manga (Monro!).

Flowers.—August-September.

Distribution.—All warm countries; Assumed to be a native of N. America. India—W. Himalaya and the Punjab.

455. *Erigeron alpinus* L.

Locality.—Dalhousie (394! Drum's Herb.).

Distribution.—Mountains of the N. Temperate Zone. India—throughout the temperate and Alpine W. Himalaya.

235. *BLUMEA* DC.

456. *Blumea Wightiana* DC. in Wight Contrib. 14.

Locality.—Peshawar College (Quizilbash 351!); Rawalpindi (Ait. 1073!).

Distribution.—Malay Islands; China; Australia; tropical Africa. Throughout the plains of India.

236. *LAGGERA SCH. BIP.*

457. *Laggera aurita* Schultz-Bip. in Herb. Hohenack.

Locality.—Lahore (2936!).

Flowers.—April.

Distribution.—Tropical Africa. Throughout the plains of India.

237. *PLUCHEA CASS.*

458. *Pluchea lanceolata* Oliv. Fl. Trop. Afr. III, 329.

Locality.—Lahore—Changa Manga (Kānji Lal 1122!); Lahore—(Parker 9724!; Stewart 2555!); Rawalpindi (Ait. 427!).

Flowers.—January-May-June.

Distribution.—Afghanistan; Baluchistan; N. Africa. India.

238. *FILAGO L.*

459. *Filago germanica* L.

Locality.—Rawalpindi (Ait. 437!); Hoshiarpur (Ait. 346!); Lyallpur (Inayat!); Lahore (Stewart 2564!).

Flowers.—March-April.

Distribution.—India—Plains and Mountains of N.-W. Provinces. Westwards to Canaries.

239. *IFLOGA CASS.*

460. *Ifloga Fontanesii* Cass. in Dict. Sc. Nat. XXIII, 14.

Locality.—Rawalpindi—Hoshiarpur (Ait. 1071!); Lahore (Stewart 2569!).

Flowers.—March.

Distribution.—India—Upper Gangetic Plains, from Saharanpur to the Frontier. Westwards to Canaries.

240. *LEONTOPODIUM Br.*

461. *Leontopodium alpinum* Cass.

Locality.—Dalhousie (15302 Drum's Herb.).

Distribution.—Alps of Europe and Central Asia. India-Alpine Himalaya.

241. *GNAPHALIUM L.*

462. *Gnaphalium luteo-album* L.

Locality.—Rawalpindi (Ait. 43!, 135!).

Flowers.—February-March.

Distribution.—Most hot and warm temperate countries. Throughout India.

242. *CAESULIA ROXB.*

463. *Caesulia axillaris* Roxb. Hort. Beng. 62.

Locality.—Hoshiarpur (Ait. 609!).

Distribution.—Throughout Northern India.

243. *INULA L.*

464. *Inula Cappa* DC. Prodr. V, 469.

Locality.—Rawalpindi (Lehtrar 9719).

Flowers.—May.

Distribution.—Java; China. India—Temperate Himalaya.

244. *VICOA CASS.*

465. *Vicoa vestita* Benth. in Gen. Pl. II, 335.

Locality.—Rawalpindi (Ait. 428!); Lahore (Stewart 2923!, 2924!, 2928!, 2557!, 2558!, 2559!).

Flowers.—April-May.

Distribution.—Afghanistan. Drier parts of India.

245. *PULICARIA GAERTN.*

466. *Pulicaria crispa* Benth, in Gen. Pl. II, 336.

Locality.—Lahore—Kot Lakhpat (Parker 17178!, 17179!, 17197!); Rawalpindi (Ait. 434!); Lahore (Stewart 2556!, 2609!).

Flowers.—March-May.

Distribution.—Arabia; Africa; the Canary and Cape Verde Islands. India—the Punjab, Upper Gangetic Plain and eastwards to Bihar.

246. *XANTHIUM L.*

467. *Xanthium Strumarium* L.

Locality.—Rawalpindi—Googerkh (Ait. 58!).

Flowers.—June-October.

Distribution.—Throughout the hotter parts of India and Ceylon, usually near houses; ascending in W. Himalaya to 5,000 ft.

247. *SIEGESBECKIA L.*

468. *Siegesbeckia orientalis* L.

Locality.—Dalhousie (15588! Drum's Herb.); Rawalpindi Barrakow (Ait. 431!).

Flowers.—September.

Distribution.—Cosmopolitan in warm climates. Throughout India, ascending to 5,000 ft. in the Himalaya.

248. *ECLIPTA L.*

469. *Eclipta alba* Hassk.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 38817!); Dalhousie (15591! Drum's Herb.); Lahore—(3003! Brandis Herb.; Stewart 2598!; Cleghorn 2650!).

Flowers.—August-October.

Distribution.—Cosmopolitan in warm climates. Throughout India, ascending to 6,000 ft. in the Himalaya.

249. *BLAINVILLEA CASS.*

470. *Blainvillea latifolia* DC. Wight Contrib. 17.

Locality.—Rawalpindi (Ait. 200!).

Flowers.—September.

Distribution.—Ceylon; tropical Asia; Africa and Australia. W. India and Deccan ascending to 5,000 ft. in Kumaon.

250. *CENIA JUSS.*

471. *Cenia turbinata* Pers. Syn. II, 465.

Locality.—Hoshiarpur (Ait.).

Probably an escape. An African type.

Distribution.—South Africa.

251. *CENTIPEDA LOUR.*

472. *Centipeda orbicularis* Lour. Fl. Coch.

Locality.—Hoshiarpur (Ait. 637!).

Distribution.—Ceylon; Afghanistan; E. tropical Asia; Australia and the Pacific Islands. Throughout the plains of India in moist places.

252. *ARTEMISIA L.*

473. *Artemisia scoparia* Waldest. & Kit. Pl. Rar. Hung. I, 66, t. 65.

Locality.—Rawalpindi (Ait. 582!).

Flowers.—October.

Distribution.—Japan; Afghanistan to Central Europe. India—Upper Gangetic Plain and westwards to Sind and the Punjab, W. Himalaya, 5-7,000 ft.

253. *SENECIO* L.474. *Senecio Coronopifolius* Desf.*Locality*.—Rawalpindi (Ait. 1069!).*Flowers*.—March.*Distribution*.—Afghanistan and westwards to Spain. India—W. Himalaya.254. *ECHINOPS* L.475. *Echinops echinatus* DC. in Wight Contrib. 24.*Locality*.—Lahore (2627!; Stewart 2590!).*Flowers*.—March-April.*Distribution*.—Afghanistan. India—Upper Gangetic Plain, N.-W. Himalaya, the Punjab, Bihar, Sind, Rajputana, the Deccan.255. *COUSINIA* CASS.476. *Cousinia minuta* Boiss. Fl. Orient. III, 489.*Locality*.—Peshawar College (Quizilbash 41!); Rawalpindi (Ait. 441!).*Flowers*.—May.*Distribution*.—Afghanistan; Baluchistan and Persia. India—the Punjab.256. *CNICUS* L.477. *Cnicus arvensis* Hoffm.*Locality*.—Peshawar—College (Quizilbash 7!); Lahore (2926! Brandis Herb!; Stewart 2608!).*Flowers*.—March-April.*Distribution*.—N. Asia and westwards to the Atlantic. India—Bengal, Gangetic Plains, the Punjab, W. Himalaya.478. *Cnicus argyracanthus* DC. Prodr. 640 (*Cirsium*).*Locality*.—Gurdaspur—Seya-purkandi (Bisram 839!).*Flowers*.—May.*Distribution*.—India—Temperate Himalaya.257. *SAUSSUREA* DC.479. *Saussurea candicans* Clarke Comp. Ind. 232.*Locality*.—Hoshiarpur (Ait. 580!).*Distribution*.—Afghanistan. Subtropical and temperate W. India and the Himalaya.480. *Saussurea albescens* Hook f. & T. in Clarke Comp. Ind. 233.*Locality*.—Dalhousie (15593! Drum's Herb.).*Distribution*.—India—W. and C. Himalaya.258. *VOLUTARELLA* CASS.481. *Volutarella divaricata* Benth. in Gen. Pl. II, 476, excl. some syns.*Locality*.—Lahore (Stewart 2591!, 2505!).*Distribution*.—Afghanistan; Baluchistan. India.259. *CENTAUREA* L.482. *Centaurea cyanus* L.*Locality*.—Rawalpindi (* Ait. 440!).*Flowers*.—April.

* May be an escape from gardens.

Distribution.—Caucasus and westwards to Atlantic. In corn fields and cultivated places of N.-W. India, sporadic.

483. *Centaurea Calciotrpa* L.

Locality.—Peshawar—College (Quizilbash 33!).

Distribution.—W. Asia and Europe, introduced in most parts of the world. N.-W. India.

260. *CARTHAMUS* L.

484. *Carthamus oxyacantha* Bieb.

Locality.—Multan (Monro 401!); Rawalpindi (Ait. 443!).

Flowers.—May.

Distribution.—India—the Punjab. Westwards to Caucasus. Perhaps a wild form of the Safflower, *C. tinctorius* (Clarke).

261. *GERBERA GRONOV.*

485. *Gerbera lanuginosa* Benth. in Gen. Pl. II, 497.

Locality.—Rawalpindi (Ait. 134!).

Flowers.—August.

Distribution.—India—W. Himalaya.

262. *CICHORIUM* L.

486. *Cichorium Intybus* L.

Locality.—Lahore (Stewart 2604!); Peshawar College (Quizilbash 51!).

Flowers.—April.

Distribution.—N.-W. India. Westwards to the Atlantic.

263. *KOELPINIA PALL.*

487. *Koelpinia linaria* Pall.

Locality.—Peshawar (Quizilbash 43!); Rawalpindi (Ait. 1071!, 439!).

Flowers.—May.

Distribution.—C. and W. Asia, N. Africa, S. Russia. India—the Punjab, Kashmir.

264. *CREPIS* L.

488. *Crepis foetida* L.

Locality.—Rawalpindi (Ait. 429!).

Flowers.—April.

Distribution.—India—the Punjab and W. Himalaya. Westwards to Atlantic.

489. *Crepis japonica* Benth. Fl. Hongk. 194.

Locality.—Hoshiarpur (Ait. 496!).

Distribution.—Ceylon; Malay Peninsula; China; Japan; Afghanistan; Mauritius. Throughout India.

265. *LACTUCA* L.

490. *Lactuca dissecta* Don. Prodr. 164.

Locality.—Rawalpindi (Ait. 457!, 450!, 452!).

Flowers.—March-April.

Distribution.—Afghanistan; Baluchistan. India—Temperate Himalaya.

266. *PICRIDIMUM DESF.*

491. *Picridium tingitatum* Desf. Bois. Fl. Orient. III, 827.

Locality.—Rawalpindi (Ait. 1070!).

Distribution.—Afghanistan; Baluchistan; Persia; Arabia; and N. Africa to the Canaries, S. Europe. India—the Punjab.

267. *SONCHUS* L.492. *Sonchus oleraceus* L.

Locality.—Rawalpindi (Ait. 447!).

Flowers.—April.

Distribution.—Throughout India.

493. *Sonchus arvensis* L.

Locality.—Rawalpindi (Ait. 445!, 202!, 149!, 448!); Lahore (Brandis 2608!).

Flowers.—March-September.

Distribution.—Throughout India.

268. *LAUNAEA* CASS.494. *Launaea asplenifolia* DC. Prodr. VII, 181 (*Microrhynchus*).

Locality.—Lahore (Stewart 2611).

Flowers.—April.

Distribution.—Plains of India.

495. *Launaea chondrilloides* DC. Prodr. VII, 183 (*Zollikoferia*).

Locality.—Rawalpindi (Ait. 455!).

Flowers.—March-April.

Distribution.—Afghanistan; Persia; Arabia; Egypt. India—Punjab, Sind Rajputana.

496. *Launaea nudicaulis* Less. Synops. 139 (*Microrhynchus*).

Locality.—Peshawar, College (Quizilbash 31!); Lahore (2920! Brandis Herb.); * Multan (281); Lahore (Stewart 2842!, 2563!); Phaltal (15!); Rawalpindi (Ait. 454!).

Flowers.—March-April.

* Grows on sandy soil. Fodder for goats only. Used here also as medicine for eyes.

Distribution.—Afghanistan and westwards to the Atlantic. Plains of India.

LXII. CAMPANULACEAE.

269. *CAMPANULA* L.497. *Campanula canescens* Wall. Cat. 1289.

Locality.—Lahore (Stewart 2826!); Hoshiarpur (Ait. 354!); Rawalpindi (Ait. 460!).

Flowers.—March.

Distribution.—Throughout India. Ceylon.

498. *Campanula colorata* Wall. Cat. 1287.

Locality.—Dalhousie (13907!, 13908! Drum's Herb.).

Distribution.—Kabul. India—temperate Himalaya 3-10,000 ft. Western Ghats 5-7,000 ft.).

LXIII. ERICACEAE.

270. *PIERIS* D.DON.499. *Pieris ovalifolia* D.Don in Edinb. Phil. Journ. XVII (1834), 159.

Locality.—Dalhousie (4701! Drum's Herb.).

Distribution.—Japan. India—temperate Himalaya; Burma.

LXIV. PLUMBAGINACEAE.

271. *PLUMBAGO* L.500. *Plumbago capensis* Thunb. Prodr. Pl. Cap. 33.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13115!).

Flowers.—April.

Distribution.—S. Africa.

LXV. PRIMULACEAE.

272. PRIMULA L.

500. *Primula erosa* Wall. Cat. 611.

Locality.—Dalhousie (13917!, 13916! Drum's Herb.).

Distribution.—India—temperate Himalaya, alt. 4,500-9,500 ft.

273. ANDROSACE L.

502. *Androsace saxifragaefolia* Bunge Enum. Pl. Chin. Bor. 53.

Locality.—Hoshiarpur (Ait. 500!).

Distribution.—N.-E. China; Japan; Loochoo Islands. India—Gangetic Plains to the Punjab and ascending the Himalayas to 4,000 ft.

503. *Androsace lanuginosa* Wall. in Roxb. Fl. Ind. ed. Wall. & Carey, II, 15.

Locality.—Dalhousie (13914! Drum's Herb.).

Distribution.—India—W. Himalaya.

274. ANAGALLIS TOURNEF.

504. *Anagallis arvensis* L.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 21019!, 20999!); Rawalpindi 8,000 ft. (Ait. 461!).

Flowers.—March-October.

Distribution.—Ceylon; Europe; W. Asia and introduced into most temperate regions. India—Bengal, N.-W. Provinces, Central India, Himalaya, Nilgiri Hills.

LXVI. MYRSINACEAE.

275. MYRSINE L.

505. *Myrsine semiserrata* Wall. in Roxb. Fl. Ind. ed. Carey & Wall. II, 293.

Locality.—Rawalpindi—Charihan 6,000 ft. (Jerram 7784!, 7783!).

Flowers.—April.

Distribution.—Himalayas, Burma.

276. ARDISIA SWARTZ.

506. *Ardisia solanacea* Roxb. Cor. Pl. 27. t. 27.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 13143!, 13144!).

Flowers.—May.

Distribution.—Ceylon, Malaya, China. Throughout India, alt. 0-5,000 ft.

507. *Ardisia Pickeringia* Terr. & Gray ex DC. Prodr. VIII, 124.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14368!, 11454!).

Flowers.—November-February.

Distribution.—Philippine Islands.

277. REPTONIA A.DC.

508. *Reptonia buxifolia* A. DC. Prodr. VIII, 153.

Locality.—Peshawar—Nizampur (8219!).

Distribution.—Afghanistan; Muscat.

LXVII. SAPOTACEAE.

278. MIMUSOPS L.

509. *Mimusops Elengi* L.

Locality.—Multan—Harani Bagh (Monro 314!).

Distribution.—Cultivated in the Tropics. India—Deccan; in N. India frequently cultivated.

510. *Mimusops hexandra* Roxb. Cor. Pl. I, 16, t. 15 and Fl. Ind. II, 238.

Locality.—Multan & Jalalpur (Monro 409!).

Flowers.—June.

Distribution.—India—Deccan common; extending north to Gujrat, Banda and Circars; cultivated in N.-W. India. Ceylon common.

LXVIII. EBENACEAE.

279. *DIOSPYROS* L.

511. *Diospyros cordifolia* Roxb. Cor. Pl. I, 38, t. 50 and Fl. Ind., II, 538.

Locality.—Hoshiarpur (Ait. 563!).

Distribution.—Burma; Malay Archipelago; Tropical Australia.

512. *Diospyros tomentosa* Roxb. Hort. Beng. 40 and Fl. Ind. II, 532.

Locality.—Hoshiarpur!

Fruits.—October.

Distribution.—India.

LXIX. OLEACEAE.

280. *JASMINUM* L.

513. *Jasminum Sambac* Ait Hort. Kew I, 8.

Locality.—Lahore—Ag. Hort. Gdns. (Mustoe 6369!).

Flowers.—June.

Distribution.—Much cultivated throughout India and in the Tropics of both hemispheres.

514. *Jasminum pubescens* Willd. Sp. Pl. I, 37.

Locality.—Hoshiarpur (Ait. 596!).

Distribution.—Burma; Ceylon; China. Throughout India.

515. *Jasminum arborescens* Roxb. Hort. Beng. 3 and Fl. Ind. ed. Carey & Wall. I, 94.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 6367!).

Flowers.—May.

Distribution.—Throughout India, in the hot lower hills, alt. 500-3,000 ft., common.

516. *Jasminum rigidum* Zenker Pl. Ind. 5, t. 6.

Locality.—Lahore—Ag. Hort. Gdns. (Mustoe 6380!).

Flowers.—April.

Distribution.—India—Deccan Peninsula. Ceylon.

517. *Jasminum auriculatum* Vahl. Symb. III, 1.

Locality.—Hoshiarpur (Ait. 561!).

Distribution.—Ceylon common; Siam and Mauritius cultivated. India—Deccan Peninsula common, cultivated in Sind, N.-W. India, Bengal.

518. *Jasminum humile* L.

Locality.—Rawalpindi 4,000-6,000 ft. (Jerram 7894!).

Flowers.—May.

Distribution.—Ceylon and Nepal common, Kabul cultivated widely. India—S. India and subtropical Himalaya common, alt. 2-5,000 ft. common.

519. *Jasminum officinale* L.

Locality.—Dalhousie (4844! Drum's Herb.); Rawalpindi 5,000 ft. (Jerram 8091!).

Flowers.—June.

Distribution.—Kabul; Persia; China; Europe, etc. Often cultivated in India.

281. FRAXINUS L.

520. *Fraxinus oxyphylla* Bieb. Fl. Taur. Cauc. II, 450.

Locality.—Lahore—Ag. Hort. Gdns. (Parker 14247!, 12970!, 13811!, 13664!).

Flowers.—April-May.

Distribution.—Tauria.

282. OLEA L.

521. *Olea cuspidata* Wall. Cat. 2817.

Locality.—Rawalpindi (P. 5891!, Ait. 205!); Hoshiarpur (Ait. 204!).

Flowers.—September. *Fruits*.—November.

Distribution.—Kabul; Baluchistan. India—N.-W. Himalaya and Kashmir, alt. 2-6,000 ft. frequent.

522. *Olea europaea* L. Sp. Pl. 8.

Locality.—Hoshiarpur (*Parker 14377!); Rawalpindi (Ait. 462!).

Flowers.—July.

* It is 5 ft. in girth near the base but, as in Lanore, gets covered with woolly blight.

Distribution.—Mediterranean region; Orient.

(To be continued)